IN THE CLAIMS:

Claims 1 through 3 and 8 through 11 have been amended herein. Claims 12-28 have been added. Please note that all claims currently pending and under consideration in the referenced application are shown below, in clean form, for clarity. Please enter these claims as amended. Also attached is a version with markings to show changes made to the claims.

1. (Twice Amended) A method for fabricating a semiconductor die assembly comprising first and second semiconductor dice, the method comprising:

providing a base lead frame having a die attach site with a first side and a second, opposing side and a plurality of primary lead fingers extending away from the die attach site;

attaching a first semiconductor die by a back side thereof to the first side of the die attach site with an active surface of the first semiconductor die facing away from the base lead frame;

attaching a second semiconductor die by a back side thereof to the second side of the die attach site with an active surface of the second semiconductor die facing away from the base lead frame;

attaching lead fingers of a first self-supporting offset lead frame extending over the first semiconductor die to the primary lead fingers of the base lead frame;

attaching lead fingers of a second self-supporting offset lead frame extending over the second semiconductor die to the primary lead fingers of the base lead frame; and

electrically connecting the lead fingers of the self-supporting first and second offset lead frames to bond pads of the first and second semiconductor dice.

2. (Amended) The method of claim 1, further comprising forming the lead fingers of the self-supporting first and second offset lead frames to respectively extend in a cantilevered manner over the first and second semiconductor dice from locations of attachment of the lead fingers of the first and second offset lead frames to the primary lead fingers.

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3. (Twice Amended) The method of claim 1, further comprising cantilevering the lead fingers of the self-supporting first and second offset lead frames respectively over the first and second semiconductor dice from a location of attachment of the lead fingers of the self-supporting first and second offset lead frames to the primary lead fingers.

4. The method of claim 1, wherein electrically connecting comprises a technique selected from the group comprising wire bonding, TAB bonding and thermocompression bonding.

5. The method of claim 1, further comprising configuring the first and second semiconductor dice with substantially centrally located bond pads.

6. The method of claim 5, further comprising configuring the first and second semiconductor dice as substantially identical dice.

7. The method of claim 6, further comprising configuring the substantially identical dice as memory dice.

8. (Twice Amended) The method of claim 1, further comprising:

configuring the base lead frame with first and second groups of primary lead fingers extending away from the die attach site on opposing sides thereof, the primary lead fingers of each group of the base lead frame being laterally spaced and mutually connected by a dam bar extending substantially transversely therebetween;

configuring the first self-supporting offset lead frame with first and second groups of lead fingers, the lead fingers of each group of the first self-supporting offset lead frame being laterally spaced and mutually connected by a dam bar extending substantially transversely

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therebetween, the dam bars of the first self-supporting offset lead frame being mutually spaced so as to be alignable in superimposition with the dam bars of the base lead frame;

configuring the second self-supporting offset lead frame with first and second groups of lead fingers, the lead fingers of each group of the second self-supporting offset lead frame being laterally spaced and mutually connected by a dam bar extending substantially transversely therebetween, the dam bars of the second self-supporting offset lead frame being mutually spaced so as to be alignable in superimposition with the dam bars of the base lead frame; and

wherein attaching the lead fingers of the first and second self-supporting offset lead frames to the primary lead fingers of the base lead frame includes aligning the dam bars of the first and second groups of lead fingers of the first and second self-supporting offset lead frames in superimposition with, and on opposing sides of, the dam bars of the first and second groups of primary lead fingers of the base lead frame.

9. (Amended) The method of claim 8, further comprising placing cavities of opposing transfer mold dies over opposing sides of the base lead frame with outer borders of the cavities on opposing sides of the die attach site being located immediately adjacent the superimposed dam bars of the first and second self-supporting offset lead frames and the base lead frame.

10. (Twice Amended) The method of claim 9, further comprising locating the outer borders of the cavities on outer surfaces of the dam bars of the first and second self-supporting offset lead frames.

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11. (Twice Amended) The method of claim 9, further comprising injecting a molten, heat-filled polymer encapsulant material into the cavities to encapsulate the first and second semiconductor dice and preventing flow of the encapsulant from the cavities past the primary

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lead fingers using the superimposed dam bars of the first and second self-supporting offset lead frames and the primary base frame.

12. (New) The method of claim 1, further comprising substantially completely encapsulating the first and second self-supporting offset lead frames.

13. (New) A method for fabricating semiconductor die assemblies comprising first, second, third, and fourth semiconductor dice, the method comprising:

providing a base lead frame strip having a first die attach site and a second adjacent die attach site, each die attach site having a first side and a second, opposing side and a plurality of primary lead fingers extending away from each die attach site;

attaching a first semiconductor die by a back side thereof to the first side of the first die attach site with an active surface of the first semiconductor die facing away from the base lead frame strip;

attaching a second semiconductor die by a back side thereof to the second side of the die attach site with an active surface of the second semiconductor die facing away from the base lead frame strip;

attaching a third semiconductor die by a back side thereof to the first side of the second die attach site with an active surface of the first semiconductor die facing away from the base lead frame strip;

attaching a fourth semiconductor die by a back side thereof to the second side of the second die attach site with an active surface of the second semiconductor die facing away from the base lead frame strip;

attaching lead fingers of a first offset lead frame having a first region extending over the first semiconductor die and a second region extending over the third semiconductor die to primary lead fingers on the first side of the base lead frame strip;

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attaching lead fingers of a second offset lead frame having a first region extending over the second and a second region extending over the fourth semiconductor die to primary lead fingers on the second side of the base lead frame strip; and

electrically connecting lead fingers of the first, and second offset lead frames to bond pads of the first, second, third, and fourth semiconductor dice.

14. (New) The method of claim 13, further comprising forming the lead fingers of the first offset lead frame to extend in a cantilevered manner over the first and third semiconductor dice from locations of attachment of the lead fingers of the first offset lead frame to the primary lead fingers and forming the lead fingers of the second offset lead frame to extend in a cantilevered manner over the second and fourth semiconductor dice from locations of attachment of the lead fingers of the second offset lead frame to the primary lead fingers.

15. (New) The method of claim 13, further comprising cantilevering the lead fingers of the first offset lead frame respectively over the first and third semiconductor dice from a location of attachment of the lead fingers of the first offset lead frame to the primary lead fingers and cantilevering the lead fingers of the second offset lead frame respectively over the second and fourth semiconductor dice from a location of attachment of the lead fingers of the second offset lead frame to the primary lead fingers.

16. (New) The method of claim 13, wherein electrically connecting comprises a technique selected from the group comprising wire bonding, TAB bonding and thermocompression bonding.

17. (New) The method of claim 13, further comprising configuring the first, second, third, and fourth semiconductor dice with substantially centrally located bond pads.

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18. (New) The method of claim 17, further comprising configuring the first, second, third, and fourth semiconductor dice as substantially identical dice.

19. (New) The method of claim 18, further comprising configuring the substantially identical dice as memory dice.

20. (New) The method of claim 13, further comprising:

configuring the base lead frame strip with a first group of primary lead fingers extending away from the side of the first die attach site distal from the second die attach site, a second group of primary lead fingers extending between the first and second die attach site, and a third group of primary lead fingers extending away from the side of the second die attach site distal from the first die attach site, each group formed on opposing sides of the base lead frame strip, the primary lead fingers of the first and third group of the base lead frame being laterally spaced and mutually connected by respective first and fourth dam bars extending substantially transversely therebetween, the primary lead fingers of the second group being laterally spaced and mutually connected by a second dam bar proximate the first die attach site and a third dam bar proximate the second die attach site;

configuring the first offset lead frame with first and second groups of lead fingers associated with the first semiconductor die and third and fourth groups of lead fingers associated with the third semiconductor die, respectively, the lead fingers of the first and second group of the first offset lead frame being laterally spaced and mutually connected by a dam bar extending substantially transversely therebetween and the lead fingers of the third and fourth group of the first offset lead frame being laterally spaced and mutually connected by a dam bar extending substantially transversely therebetween, the dam bars of the first offset lead frame being mutually spaced so as to be alignable in superimposition with the first and second dam bars of the base lead frame, respectively;

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configuring the second offset lead frame with first and second groups of lead fingers associated with the second semiconductor die and third and fourth groups of lead fingers associated with the fourth semiconductor, the lead fingers of each group of the second offset lead frame being laterally spaced and mutually connected by a dam bar extending substantially transversely therebetween, the dam bars of the second offset lead frame being mutually spaced so as to be alignable in superimposition with the third and fourth dam bars of the base lead frame; and

wherein attaching the lead fingers of the first and second offset lead frames to the primary lead fingers of the base lead frame includes aligning the dam bars of the first, second, third and fourth groups of lead fingers of the first and second offset lead frames in superimposition with, and on opposing sides of, the dam bars of the first and second groups of primary lead fingers of the base lead frame.

21. (New) The method of claim 20, further comprising placing cavities of opposing transfer mold dies over opposing sides of the base lead frame strip at both the first and second die attach site with the lateral outer extent of the cavities and being located immediately adjacent to the superimposed dam bars of the first and second offset lead frames and the base lead frame strip.

22. (New) The method of claim 21, further comprising locating the lateral outer extent of the cavities on outer surfaces of the dam bars of the first and second offset lead frames.

23. (New) The method of claim 21, further comprising injecting a molten, heat-filled polymer encapsulant material into the cavities to encapsulate the first, second, third, and fourth semiconductor dice and preventing flow of the encapsulant from the cavities past the primary lead fingers using the superimposed dam bars of the first and second offset lead frames and the primary base frame.

24. (New) The method of claim 13, further comprising substantially completely encapsulating the first and second offset lead frames.

25. (New) The method of claim 13, further comprising separating the first die attach site from the second die attach site.

26. (New) The method of claim 25, wherein separating the first die attach site from the second die attach site comprises:

severing the first offset lead frame at a position laterally between the first lateral end region and the second lateral end region;

severing the second offset lead frame at a position laterally between the first lateral end region and the second lateral end region; and

severing the base lead frame at a position laterally between the first die attach site and the second die attach site.

27. (New) The method of claim 23, further comprising separating the first die attach site from the second die attach site.

28. (New) The method of claim 27, wherein separating the first die attach site from the second die attach site comprises:

severing the first offset lead frame at a position laterally between the first lateral end region and the second lateral end region;

severing the second offset lead frame at a position laterally between the first lateral end region and the second lateral end region; and

severing the base lead frame at a position laterally between the first die attach site and the second die attach site.